The Effect of Risk Perception, Recency Bias, Herding Behavior and Regret Aversion Bias on Investment DecisionMaking Among The Younger Generation in Surabaya.

Gradinda Maryama Mayora^{1*}

(gradindamaryama@gmail.com)

Faculty of Economy and Business, Hayam Wuruk University Perbanas Surabaya

Wiwik Lestari²

(wiwiek@perbanas.ac.id)

Faculty of Economy and Business, Hayam Wuruk University Perbanas Surabaya

(Submit: 7th December 2023, Revised: 21st February 202024, Accepted: 23rd February 2024)

ABSTRACT

The performance of the Indonesian capital market continues to increase every year. Data from KSEI shows that the number of investors continues to increase every year and the majority of investors are generational. This study aims to determine/influence risk perception, recency bias, herding/behavior and regret aversion bias towards investment decision making/in generations in Surabaya. This research was conducted using a quantitative approach. The data collection method for testing the relationship between the independent variable and the dependent variable is by distributing questionnaires in the google form via social media WhatsApp, Instagram and Telegram. There were 111 respondents who filled out this research questionnaire, with the characteristics of respondents aged 17 years to 36 years, domiciled in Surabaya and having an account or investment account. The data was analyzed using PLS-SEM with Wrap-PLS software version 8.0. The results show that Risk perception has a significant effect on investment decision making, Recency bias has a negative effect on investment decision making, and regret aversion bias does not have a negative effect on investment decision making.

Keywords: Risk perception, recency bias, herding behavior, regret aversion bias and investment decision making.

1. INTRODUCTION

The increasingly consistent economic recovery at this time can have a positive effect on economic growth in Indonesia. This can be shown by the increasingly positive attitude of investors towards the capital markets industry in Indonesia. Although Investors are made pessimistic by the International Monetary Fund (IMF) forecast regarding the global economy in 2023 about a recession, however the Indonesian capital market industry showed positive achievements with an increase in the performance of the Composite Stock Price Index (IHSG). The Composite Stock Price Index closed 2023 with a strong annual performance. It was recorded that the JCI performance throughout 2023 strengthened 6.16% (IDX, 2023).

According to KSEI (2023), the latest data in August 2023 saw the number of investors increase to 11.58 million, of which around 6.61 million or 57.04% were young investors under 35 years of age. The number of young investors in the capital market is observed to consistently increase throughout 2023 (KSEI, 2023). Based on the results of studies related to investment, it shows the involvement of the younger generation in the Indonesian economy with the majority aged 18-35 years.

ISSN 2549-3604 (Online), ISSN 2549-6972 (Print)

DOI: http://dx.doi.org/10.25139/ekt.v8i1.7482

The younger generation's interest in investing is due to the ease of accessing information via social media to learn about investing (UGM, 2023). But many young investors experience losses when investing in the capital market. Young investors only focus on getting quick profits and large amounts without paying attention to what risks they will receive in the future (Mutawally & Haryono, 2019).

Investment is an activity to place funds or invest capital in one or more assets for a certain period of time with the hope that investors can obtain income and increase the value of their investment in the future (Hidayati, 2017). Investors' investment decision making is influenced by this increase in investment activity. An investment

decision is a choice that investors will make to gather opinions about an asset in the hope of making a profit in the future (Fridana & Asandimitra, 2020).

Investors' actions when making investment decisions will be faced with several considerations and these investors will act rationally or irrationally (Permata & Mulyani, 2022). Rational investors will pay attention to all information and carry out analysis before making investment decisions. Investors' irrational attitudes can result in biases or deviations that influence investment decision making (Pradhana, 2018). Investors who experience bias in decision making will ignore existing facts and information, miscalculate risks, may conclude something themselves and be convinced that their decision or choice is the most correct. This bias in investment decision making often occurs in the younger generation (Puspawati & Yohanda, 2022).

Investment decision making is also influenced by an investor's risk perception. Risk perception is an investor's perspective or thinking about uncertain risks (Pradikasari & Isbanah, 2018). According to Irjayanti & Kurniawati (2017) Risk perception can be interpreted as a process of perception, evaluation and interpretation of risk by an investor regarding investment instruments, and is related to the investment decision making process.

One of the human personalities that can make irrational investment decisions is recency bias. Recency bias is an individual's behavior when remembering or only paying attention to the last information they obtained (Alvia, 2011). Investors with recency bias when making investment decisions will cause investment decisions to be less than optimal, because it can cause selection error instrument investment that will deliver return doesn't fit with that desired (Young, 2010).

Social factors can also influence investment decisions. Variables regarding social factors that can influence investment decisions, namely Herding (Fityani, 2015). Herding behavior is the behavioral tendency of a person or investor to imitate the decisions of other investors or the majority (Afriani & Halmawati, 2019). According to Liem & Sukamulja (2017) herding behavior is said to be follow-up behavior. Investors who own herding behavior will be easy affected with the decisions of other individuals and this can influence the investment decisions that will be taken.

Other factors that influence investors when making investment decisions are regret aversion bias. Addinpujoartanto & Darmawan (2020) stated that regret aversion bias is an influential factor in making investment decisions. Regret aversion bias It can also be interpreted as behavior to avoid mistakes in decision making because investors have a fear of facing the same losses as an investor (Mahadevi Aulia & Asandimitra, 2021). This behavior can lead to biased decision making resulting in poor decisions (Akinkoye & Bankole, 2020).

From the description above, this research aims to obtain empirical evidence that there is an influence of risk perception, recency bias, herding behavior and regret aversion bias on investment decision making. The novelty of this research is the research object, specifically the population studied is the young generation in Surabaya. Using four independent variables, namely risk perception, recency bias, herding behavior and regret aversion bias, which have never been tested simultaneously. This research uses PLS-SEM with Wrap-PLS software version 8.0 which researchers have never used before.

2. THEORETICAL FRAMEWORK AND HYPOTHESIS FORMULATION

Investment decision making is also influenced by an investor's risk perception. Risk perception is an investor's perspective or thinking about uncertain risks (Pradikasari & Isbanah, 2018). An investor will definitely consider the risks and impacts first when faced with a decision-making situation. Investors tend to interpret a risky situation when the investor experiences a loss due to a bad decision, especially when the loss has an impact on the investor's finances (Badriatin et al., 2022).

Someone who has a level of risk perception high will be more careful when making investment decisions, so that investment decisions will be more optimal. Someone with a level of risk perception those who are low will be very brave when making decisions because they have a lot of experience related to investment and will produce optimal investment decisions (Novianggie & Asandimitra, 2019). According to Ainia & Lutfi (2019) Risk perception has a significant negative effect on investment decision making. This can be interpreted as someone who has the perception and considers that an investment has a high risk, then that person tends to avoid allocating funds to that investment and prefers to invest in low-risk assets, such as savings and deposits.

Previous research results regarding influence risk perception on investment decision making made by Yolanda & Tasman (2020) and Novianggie & Asandimitra (2019) shows that risk perception has a positive effect on investment decisions, while research by Ainia & Lutfi (2019) states risk perception negative effect on investment decisions.

H1: Risk perception has a significant effect on investment decision making among the younger generation in Surabaya.

One of the human personalities that can make irrational investment decisions is recency bias. Recency bias is an individual's behavior when remembering or only paying attention to the last information they obtained (Alvia, 2011). Investors with recency bias when making investment decisions will cause investment decisions to be less than optimal, because it can cause errors in selecting investment instruments that will provide return that does not fit with that desired (Young, 2010). Investors with recency bias will only prioritize the latest fundamental information compared to previous information before making investment decisions (Pinsker, 2011).

Investors with recency bias will be more likely to believe the information they have just received. Investors with recency bias when making investment decisions it can result in less than optimal investment decisions, because investors tend to only base on the latest or newly obtained information (Alvia, 2011). The latest information or events do not really represent information that actually occurs and can cause irrational behaviorin making investment decisions (Rose & Armansyah, 2022).

Ekspektra: Jurnal Bisnis dan Manajemen, Volume 8, Nomor 1, Hal. 80-94

ISSN 2549-3604 (Online), ISSN 2549-6972 (Print)

DOI: http://dx.doi.org/10.25139/ekt.v8i1.7482

Recency bias in investors can arise because investors do not understand the information obtained and do not understand how to fundamentally analyze the information, investors also have confidence that the newly obtained information can provide return as expected (Pinsker, 2011).

The results of previous research conducted by Alvia (2011), Pinsker (2011) and Rose & Armansyah (2022) stated that recency bias has a positive effect on investment decision making. Young (2010) states that recency bias has a negative effect on investment decision making.

H2: Recency bias has a negative effect on investment decision making among the younger generation in Surabaya.

Social factors can also influence investment decisions. Variables regarding social factors that can influence investment decisions, namely herding (Fityani, 2015). Herding behavior is the behavioral tendency of a person or investor to imitate the

decisions of other investors or the majority (Afriani & Halmawati, 2019). According to Liem & Sukamulja (2017) Herding behavior is said to be follow-up behavior.

Herding behavior influence investment decision making, when the level herding behavior high leads to more irrational investment decisions. Herding can result in risky decisions because when making investment decisions, investors tend to be less confident in their abilities and knowledge and are more likely to follow the decisions taken by the majority of investors (Ayudiastuti, 2021). According to Addinpujoartanto & Darmawan (2020) Investors who experience herding will find it difficult to understand and evaluate the various information received and in the end, investors prefer to use shortcuts, such as imitating the decisions of other investors or institutions that are considered to be able to process information well, so that the decisions taken will be optimal and produce profits.

Based on research conducted by Witantri & Triyanto (2023), Permata & Mulyani (2022) and Addinpujoartanto & Darmawan (2020) stated herding behavior has a positive effect on investment decision making. Ayudiastuti (2021) states herding behavior has a negative effect on investment decision making, while research by Salvatore & Esra (2020) and Setiawan et al. (2018) show herding behaviorhas no effect on investment decision making.

H3: Herding behavior has a significant effect on investment decision making among the younger generation in Surabaya.

Other factors that influence investors when making investment decisions are regret aversion bias. Addinpujoartanto & Darmawan (2020) stated that regret aversion bias is an influential factor in making investment decisions. Regret aversion bias it can also be interpreted as behavior to avoid mistakes in decision making because investors have a fear of facing the same losses as an investor Mahadevi Aulia & Asandimitra (2021). This behavior can lead to biased decision making resulting in poor decisions.

Experienced investors' regret aversion will experience doubts in investing and can result in losses. (Akinkoye & Bankole, 2020) stated that regret aversion occurs when investors avoid regret or pain that has occurred in the past because they made mistakes in decision making or the decisions taken were less than optimal.

Based on research conducted by Budiarto & Susanti (2017), Mahadevi Aulia & Asandimitra (2021) and Nursalimah et al. (2022) states that regret aversion bias has a significant negative effect on investment decision making, while research by Salvatore & Esra (2020) states that regret aversion has no effect on investment decision making.

H4: Regret aversion bias has a negative effect on investment decision making among the younger generation in Surabaya.

3. RESEARCH METHOD

This research uses a survey method, namely a questionnaire to collect data. Questionnaire in the form of a google form containing statements and a google form link were sent to respondents via social media such as WhatsApp, Instagram and Telegram. Respondents to this study have the special criteria are the young generation who live in Surabaya, aged 17-36 years, have an investment account and have made investment transactions. The questionnaire will later collect answers from respondents which can later be used to find out whether risk perception, recency bias, herding behavior and regret aversion bias influence investmentdecision making.

This research was conducted using a quantitative approach. The following areoperational definitions and indicators of variables in this study:

Table 1: Variable Definitions and Indicators

Variable Definition Indicators / Measurements Scale						
Investment	Process of determining		Risk	Likert		
Decision	investor goals or		Return			
Making	choices, searching for	3.	The time factor			
	and evaluating					
	information related to					
	several alternative					
	investment instruments.					
Risk	Investor's perception or	1.	Find out and consider	Likert		
Perception	way of thinking about a		the risks you will			
	risk that will be		accept before			
	accepted, even if the risk		investing.			
	that will occur is not	2.	Choose investment			
	necessarily the sameas		instruments based on			
	reality.		information about			
			known and			
			consideredrisks.			
		3.	Investors' confidence			
			ininvestments with			
			high risks can produce			
			large profits (high risk			
			high return).			
		4.	Consider risk as			
			awarning before			
			investing.			
			·			

ISSN 2549-3604 (Online), ISSN 2549-6972 (Print) DOI: http://dx.doi.org/10.25139/ekt.v8i1.7482

Recency Bias	Biased behavior that occurs in investors because they only believe and remember newly obtained information.	 Invest based on the latest information youcan get. Look at the history of investment performance for the last1-3 years before investing. Pay attention to historical investment performance and carryout fundamental analysis. Focus on the latest information and not pay attention to previous information. 	Likert
Herding Behavior	Behavior that tends to follow or imitate what other people do rather than following the information or beliefs they have.	 The decisions of otherinvestors to buy and sell investment instruments have an impact on investment decision making. Invest by imitating orfollowing friends' recommendations. Often buy the same investment instruments with friends. Does not react quickly to changes in decisions of other investors. Often follow and understand market information to make investments. 	Likert

Regret	Behavior of	1. Fear of the risk		
Aversion Bias	regrettingtoo	of loss that		
	much as a result	might be faced		
	ofinvesting,	when making a		
	especially when	new		
	experiencing a	investment.		
	very large	2. Experiencing		
	investment loss.	doubtswhen ma		
		3. Having a bad		
		experience		
		when investing		
		makes you		
		regret it after		
		making an		
		investment		
		decision.		
		Be careful when		
		making investment		
		decisions because		
		youhave had bad		
		experiences.		

Sources: (Putri & Hamidi, 2019), (Florencia & Arifin, 2022), (Rose & Armansyah, 2022), (Hidajat et al., 2021), and (Nurdinda et al., 2020)

The analysis techniques used in this research are descriptive techniques and statistical analysis techniques Partial Least Square (PLS) with method Structural Equation Model (SEM). The software used is WarpPLS 8.0 with easy-to-use features (Ned Kock, 2022:9).

Descriptive analysis can provide a general description of the variables used in this research. Statistic test Partial Least Square (PLS) with method Structural Equation Model (SEM) can test the relationship between latent constructs in linear and nonlinear relationships with various indicators. This research can test the influence of the relationship between independent variables (X), namely risk perception, recency bias, herding behavior and regret aversion bias on the independent variable (Y), namely investment decision making.

4. RESULTS AND DISCUSSION

Characteristics of Respondents

This research uses a sample of 111 respondents. The results of the respondent's characteristics are presented in the following figure:

Ekspektra: Jurnal Bisnis dan Manajemen, Volume 8, Nomor 1, Hal. 80-94

ISSN 2549-3604 (Online), ISSN 2549-6972 (Print)

DOI: http://dx.doi.org/10.25139/ekt.v8i1.7482

GenderAmountPerMan56Woman55	rcentage 51% 49%
	49%
Woman 55	
Work Amount Per	rcentage
Students 83	75%
Private sector employee 19	17%
Civil servants/BUMN employees 2	2%
ABRI/TNI/POLRI 0	0%
Businessman 7	6%
Current Age Amount Per	rcentage
17 - 20 Years 28	25%
21 - 24 Years 68	61%
25 - 28 Years 8	7%
29 - 32 Years 3	3%
33 - 36 Years 4	4%
Investment Time Amount Per	rcentage
1 - 3 Months 27	24%
4 -6 Months 26	24%
7 - 9 Months 7	6%
10 - 12 Months 7	6%
> 12 Months 44	40%
Average investment frequency every week Amount Per	rcentage
1 - 5 Times 89	80%
6 - 10 Times 12	11%
11 - 15 Times 2	2%
16 - 20 Times 1	1%
>20 Times 7	6%
Investment managed funds Amount Per	rcentage
Rp 10.000 – Rp 500.000 58	52%
Rp 500.001 – Rp 1.000.000 22	20%
Rp 1.000.001 – Rp 1.500.000 7	6%
Rp 1.500.001 – Rp 2.000.000 6	6%
>Rp 2.000.000 18	16%
	rcentage
Yes 100	90%
No 11	10%
	rcentage
Yes 72	65%
No 39	35%

Source: processed by the author

Measurement Model Analysis

1. Outer Model Evaluation

Evaluation outer model used to test the level of validity and reliability of the independent and dependent variables of each question item. The validity test can be said to be valid when the loading factor is > 0.50 and if the Cronbach Alpha value is > 0.60 then the data is said to be reliable (Hair et al., 2017: 199). The following is the outer loadings value of each latent variable indicator contained in this research

variable:

Table 3: Outer Model Evaluation

Variable	Item	Loading Factor	Cronbach's Alpha
Investment	IDM 1	0,75 (Valid)	
Decision	IDM 2	0,81 (Valid)	0,71
Making	IDM 4	0,78 (Valid)	(Reliable)
Wiaking	IDM 7	0,55 (Valid)	
	RP 1	0,83 (Valid)	0.75
Risk	RP 2	0,89 (Valid)	0,75
Perception	RP 3	0,58 (Valid)	(Reliable)
	RP 4	0,72 (Valid)	
Recency	RB 2	0,86 (Valid)	0,66
Bias	RB 3	0,86 (Valid)	(Reliable)
	HB 1	0,71 (Valid)	
Herding	HB 2	0,86 (Valid)	0,74
Behavior	HB 3	0,86 (Valid)	(Reliable)
	HB 4	0,55 (Valid)	
	RAB 1	0,75 (Valid)	
Regret Aversion Bias	RAB 2	0,81 (Valid)	0,75
	RAB 3	0,79 (Valid)	(Reliable)
	RAB 4	0,68 (Valid)	

Source: WarpPLs (processed by the author)

Based on table 3, it can be explained that all variable indicators have a loading factor of more than 0.5 so they can be said to be valid and the cronbach's alpha value is more than 0.6 so they can be said to be reliable.

2. Discriminant validity

Discriminant Validity can be done to ensure that each concept from each latent model is different from other variables. The method used to measure discriminant validity indicators, namely looking at the value of the AVE factor or being able to compare the square root of AVE (Average Variance Extracted) must be greater than the correlation between latent constructs.

Table 4: Average Variance Extracted

	RP	RB	HB	RAB	IDM
RP	0.769				
RB	0.361	0.861			
HB	-0.070	0.059	0.759		
RAB	0.027	-0.017	0.460	0.761	
IDM	0.499	0.359	0.113	0.105	0.738

Source: WarpPLs (processed by the author)

ISSN 2549-3604 (Online), ISSN 2549-6972 (Print)

DOI: http://dx.doi.org/10.25139/ekt.v8i1.7482

Based on test results discriminant validity it can be seen that the AVE root value construct for each variable has a greater value than the AVE root value of the other variables. So, based on the results of the outer model evaluation, it can be concluded that all statement items for each variable have good validity and reliability values.

3. Inner Model Evaluation

Based on the results of the outer model evaluation, there is a model after the third sample test which can be seen in figure 1. In the inner model evaluation, the R-Square test is used to determine the magnitude of the influence of the independent variable on the dependent variable. Test results are as follows:

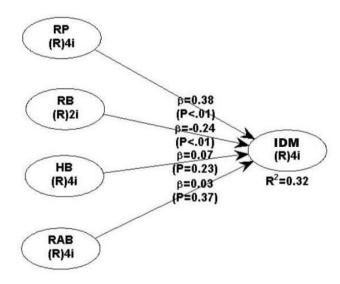


Figure 1: SEM-PLS Model

Source: WarpPLs (processed by the author)

Based on figure 1, the test results show that investment decision making has an R-Square value of 0.32, which shows that this research model is a moderate modelso it can be concluded that the investment decision making variable is explained by 32% by the variable risk perception, recency bias, herding behavior, and regret aversion bias while the rest is explained by other variables outside the research.

4. Hypothesis Test

Table 5: Hypothesis Test

		Original Sample (O)	R-Square	P- Values
Hypothesis 1	$RP \rightarrow IDM$	0,385		<0,001
Hypothesis 2	RB → IDM	-0,238	0.22	0,004
Hypothesis 3	HB → IDM	0,070	- 0,32 	0,228
Hypothesis 4	RAB → IDM	0,032		0,367

Source: WarpPLs (processed by the author)

First hypothesis is: Risk perception has a significant effect on investment decision making among the younger generation in Surabaya. Based on table 5, it shows that H1 is accepted path coefficient 0.385 and P-Values <0.001. This means that optimal investment decision making is significantly influenced by risk perception. Someone who has a high level of risk perception will be more careful when making investment decisions, so that investment decisions will be more optimal. A person with a low level of risk perception will be very bold when making decisions and will produce less than optimal investment decisions. If someone has a high risk perception, they usually have a strong stance, this is because investors take action with full consideration with the various information they have.

According to the results of the respondents' answers, a high risk perception value was obtained, namely 4.17 and this caused the respondents to make quite optimal investment decisions with a score of 3.26. The majority of respondents withat percentage of 75% answered agree and strongly agree to the statement find out and consider the risks that will be accepted before investing and choose investment instruments based on information about risks that are known and considered. Respondents also consider that risk is a warning before investing, so they are always careful in making investment decisions and produce optimal investment decisions.

The results of this research are in line with previous research according to Novianggie & Asandimitra (2019) and Yolanda & Tasman (2020) which stated that risk perception has a significant effection investment decision making. The results of this research are not in line with Pradikasari & Isbanah (2018) who state that risk perception has no effect on investment decision making.

Second hypothesis is: Recency bias has a negative effect on investment decision making among the younger generation in Surabaya. Based on table 4, it shows that H2 is an accepted path coefficient -0.238 and P-Values 0.004. This means it is getting lower recency bias then investor decision making will be more optimal. Investors with recency bias when making investment decisions can result in less than optimal investment decisions, because investors tend to only base on the latest or newly obtained information. The latest information obtained is not necessarily correct and in accordance with existing facts.

According to the results of respondents' answers, a low recency bias value was obtained, namely 2.07 and this caused respondents to make quite optimal investment decisions with a score of 3.26. The majority of respondents with a percentage of 60% chose the answer agree and strongly agree to the statement. Look at the history of investment performance for the last 1-3 years before investing and pay attention to the history of investment performance and carry out fundamental analysis. This shows that respondents do not invest based on the latest information and focus on the latest information only, but respondents still pay attention to previous information.

Young (2010) states that investors with recency bias when making investment decisions will cause investment decisions to be less than optimal, because it can cause errors in selecting investment instruments that will provide return not as desired. The results of this research are in line with research by Young (2010). States that recency bias have a significant negative effect on investment decision making. This research is not in line with Alvia (2011) and Rose & Armansyah (2022) which states that recency bias has a positive influence on investment decision making.

Third hypothesis is: Herding Behavior has a significant effect on investment decision making among the younger generation in Surabaya. Based on table 4, it shows that H3 has a rejected path coefficient 0.070 and P-Values 0.228. This means that optimal investment decision making is not significantly influenced by herding

ISSN 2549-3604 (Online), ISSN 2549-6972 (Print)

DOI: http://dx.doi.org/10.25139/ekt.v8i1.7482

behavior. Investment still uses knowledge and pays attention or considers the information it receives, and then carries out analysis as a consideration in the investment decision making process. Investors do not completely copy other investors' decisions or follow friends' recommendations.

Based on the results of respondents' responses about herding behavior the majority of respondents in this research were students with a percentage of 75%, meaning they were still in the study process, making it easier to gain knowledge and knowledge related to investment. This is also supported by 90% of respondents who have participated in socialization regarding investment so that they better understand and understand how to analyze the information received before making investment decisions.

The results of this research are in line with research by Mahadevi Aulia & Asandimitra (2021) which states that herding behavior does not significantly influence investment decision making. This research is not in line with research by Mutawally & Haryono (2019) and Ayudiastuti (2021), which states that herding behavior has a significant influence on investment decision making.

Fourth hypothesis is: Regret Aversion bias has a negative effect on investment decision making among the younger generation in Surabaya. Based on table 4, it shows that H4 has a rejected path coefficient 0.032 and P-Values 0.367. This means height regret aversion bias does not result in poor investment decisions. When experiencing a loss, investors tend to avoid the same loss. This does not traumatize investors in making investment decisions, but can be used as experience by investors, so that in the future investors can pay attention and consider the information received before making investment decisions.

The majority of respondents in this study with a percentage of 52% have the amount and management to invest between IDR 10,000 to IDR 500,000. On average, respondents have managed funds to invest small amounts, so that when they experience a loss in investing it does not cause a large loss and does not make the

respondent experience trauma. The majority of respondents also have investment experience of more than 12 months with a percentage of 40%, so respondents alreadyhave experience in making investment decisions and know how to make optimal investment decisions even though they have had bad experiences in investing.

The results of this research are in line with research by Salvatore & Esra (2020) which states that regret aversion has no effect on investment decision making. This research is not in line with research conducted by Budiarto & Susanti (2017), Mahadevi & Haryono (2021) and Nursalimah et al. (2022) which states that regret aversion can have a significant negative effect on investment decision making.

5. CONCLUSIONS, IMPLICATIONS, SUGGESTIONS AND LIMITATIONSOF THE RESEARCH

Conclusions obtained from this research are 1) Risk perception has a significant effect on investment decision making among the younger generation in Surabaya. It means high and low risk perception influence optimal investment decision making. 2) Recency bias has a negative effect on investment decisions making among the younger generation in Surabaya. It means the higher it is recency bias then investor decision making is increasingly less than optimal. 3) Herding behavior no significant effect on investment decisions making among the younger generation in Surabaya. It means high and low herding behavior does not affect optimal investment decision making. 4) Regret aversion bias does not have a negative

effect on investment decision making in the young generation in Surabaya. It means the higher the regret aversion bias, does not lead to bad investment decisions.

The implications of this research are expected to contribute to research related to the influence of risk perception, recency bias, herding behavior and regret aversion bias on investment decision making. When making investment decisions, investors must pay attention to three important things, namely risk, profit and time factors. Investors must pay attention and consider all information received as well as the history of investment performance to obtain optimal investment decisions.

Even though the research has been carried out with careful methods and planning, there are still several limitations. First, during the data collection process the researcher could not directly monitor the respondents one by one in filling out the questionnaire so that the researcher could not ensure that the respondents read and understood in detail the statements in the questionnaire. Second, there are fewer statements for each indicator in the questionnaire, so that when there are invalid statements, only a few statements remain.

REFERENCES

- Addinpujoartanto, N. A., & Darmawan, S. (2020). Pengaruh Overconfidence, Regret Aversion, Loss Aversion, Dan Herding Bias Terhadap Keputusan Investasi Di Indonesia. *Jurnal Riset Ekonomi Dan Bisnis*, *13*(3), 175. https://doi.org/10.26623/jreb.v13i3.2863
- Afriani, D., & Halmawati, H. (2019). Pengaruh Cognitive Dissonance Bias, Overconfidence Bias Dan Herding Bias Terhadap Pengambilan Keputusan Investasi. *Jurnal Eksplorasi Akuntansi*, *1*(4), 1650–1665. https://doi.org/10.24036/jea.v1i4.168
- Ainia, N. S. N., & Lutfi, L. (2019). Pengaruh Risk Perception, Risk Tolerance, Overconfidence dan Loss Aversion Terhadap Pengambilan Keputusan Investasi. *Journal of Economics, Business & Accountancy Ventura*, 21(3), 401–413.
- Akinkoye, E. Y., & Bankole, O. E. (2020). Effect of Emotional Biases on Investor's Decision Making in Nigeria. *International Journal of Business and Management Future*, 4(1), 33–39. https://doi.org/10.46281/ijbmf.v4i1.548
- Alvia, L. (n.d.). Pengujian Efek Resensi dan Pengetahuan pada Penyajian Informasi Analisis Fundamental & Teknis *: Studi Eksperimen pada Pengambilan Keputusan Investasi Saham. 2.
- Ayudiastuti, L. (2021). Analisis Pengaruh Keputusan Investasi Mahasiswa. *Jurnal Ilmu Manajemen*, 9(3), 1138–1149. https://doi.org/10.26740/jim.v9n3.p1138-1149
- Badriatin, T., Rinandiyana, L. R., & Marino, W. S. (2022). Persepsi Risiko Dan Sikap Toleransi Risiko Terhadap Keputusan Investasi Mahasiswa. *Jurnal Perspektif*, 20(2), 158–163. https://doi.org/10.31294/jp.v20i2.13596
- Budiarto, A., & Susanti. (2017). Pengaruh Financial Literacy, Overconfidence, Regret Aversion Bias, dan Risk Tolerance terhadap Keputusan Investasi. *Jurnal Ilmu Manajemen (JIM)*, 5(2), 1–9.
- Fityani, I. (2015). Analisis Investor Herding Behavior Dengan Multinomial Logit. 3(1), 16–36.
- Florencia, I., & Arifin, A. Z. (2022). Pengaruh Financial Knowledge, Financial Self-Efficacy, dan Risk Perception terhadap Investment Intention di Pasar Saham. *Jurnal Manajerial Dan Kewirausahaan*, 4(2), 378. https://doi.org/10.24912/jmk.v4i2.18236

- Fridana, I. O., & Asandimitra, N. (2020). Analisis Faktor Yang Memengaruhi Keputusan Investasi (Studi Pada Mahasiswi Di Surabaya). *Jurnal Muara Ilmu Ekonomi Dan Bisnis*, 4(2), 396. https://doi.org/10.24912/jmieb.v4i2.8729
- Hair, J., Hollingsworth, C. L., Randolph, A. B., & Chong, A. Y. L. (2017). An updated and expanded assessment of PLS-SEM in information systems research. *Industrial Management & Data Systems*, 117(3), 442–458. https://doi.org/10.1108/IMDS-04-2016-0130
- Hidajat, A., Margaretha, F., Ilmiah, Y. P.-F. V. J., & 2022, undefined. (2021). Bias perilaku investor dalam mengambil keputusan berinvestasi. *Journal.Ikopin.Ac.Id*, 05(01), 510–521. http://journal.ikopin.ac.id/index.php/fairvalue/article/download/1385/1254
- Hidayati, A. N. (2017). Investasi: Analisis dan Relevansinya dengan Ekonomi Islam. *Jurnal Ekonomi Islam*, 8(2), 227–242.
- IDX. (2023). *BEI Optimis Pertumbuhan Kinerja akan Lebih Baik*. https://www.idx.co.id/id/berita/siaran-pers/1948
- Irjayanti, D., & Kurniawati, S. L. (2017). Pengaruh literasi keuangan, representativeness, familiarity, dan persepsi risiko terhadap pengambilan keputusan investasi pada investor surabaya dan sidoarjo. *Jurnal Ilmu Manajemen*, 5(9), 1–17.
- KSEI. (2023). Data Statistik Bulan Agustus 2023. https://www.ksei.co.id/files/Statistik_Publik_Agustus_2023_v2.pdf
- Liem, W. K. A., & Sukamulja, J. S. (2017). Perilaku Herding Pada Indeks Sektoral dan Saham-Saham Terpilih. *Repository Universitas Atma Jaya Yogyakarta*, *1*(69), 5–24. http://e-journal.uajy.ac.id/12711/1/JURNAL.pdf
- Mahadevi Aulia, S., & Asandimitra, N. (2021). Pengaruh Status Quo, Herding Behaviour, Representativeness Bias, Mental Accounting, Serta Regret Aversion Bias Terhadap Keputusan Investasi Investor Milenialdi Kota Surabaya. *Jurnal Ilmu Manajemen*, 9(2), 1–15.
- Mahadevi, S. A., & Haryono, N. A. (2021). Pengaruh Status Quo, Herding Behaviour, Representativeness Bias, Mental Accounting, serta Regret Aversion Bias terhadap Keputusan Investasi Investor Milenial di Kota Surabaya. *Jurnal Ilmu Manajemen*, 9(2), 779. https://doi.org/10.26740/jim.v9n2.p779-793
- Mutawally, F. W., & Haryono, N. A. (2019). Pengaruh Financial Literacy, Risk Perception, Behavioral Finance Dan Pengalaman Investasi Terhadap Keputusan Investasi Mahasiswa Surabaya. *Jurnal Ilmu Manajemen (JIM)*, 7(4), 942–953.
- Ned Kock. (2022). WarpPLS User Manual: Version 8.0. ScriptWarp Systems.
- Novianggie, V., & Asandimitra, N. (2019). The Influence of Behavioral Bias, Cognitive Bias, and Emotional Bias on Investment Decision for College Students with Financial Literacy as the Moderating Variable. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 9(2), 92–107. https://doi.org/10.6007/IJARAFMS/v9-i2/6044
- Nurdinda, W., Muslihat, A., & Putra, R. A. K. (2020). Pengaruh Regret Aversion Bias Dan Risk Tolerance Bagi Investor Muda Jawa Barat Terhadap Keputusan Investasi. *AKUNSIKA: Jurnal Akuntansi Dan Keuangan*, 1(1), 30. https://doi.org/10.31963/akunsika.v1i1.1619
- Nursalimah, E., Utami, I., & Panorama, M. (2022). Pengaruh Regret Aversion Bias dan Overconfidence terhadap Pengambilan Keputusan Investasi Cryptocurrency. *Jurnal Manajemen Bisnis Dan Keuangan*, *3*(2), 47–55. https://doi.org/10.51805/jmbk.v3i2.59
- Permata, C. Y., & Mulyani, E. (2022). Pengaruh Informasi Akuntansi, Risk Perception

- dan Herding terhadap Keputusan Investasi. *Jurnal Eksplorasi Akutansi (JEA)*, 4(2), 311–323. http://jea.ppj.unp.ac.id/index.php/jea/index
- Pinsker, R. (2011). Primacy or recency? A study of order effects when nonprofessional investors are provided a long series of disclosures. *Behavioral Research* in Accounting, 23(1), 161–183. https://doi.org/10.2308/bria.2011.23.1.161
- Pradhana, R. W. (2018). Pengaruh Financial Literacy, Cognitive Bias, dan Emotional Bias Terhadap Keputusan Investasi (Studi Pada Investor Galeri Investasi Universitas Negeri Surabaya). *Jurnal Ilmu Manajemen*, 6(3), 108–117. https://jurnalmahasiswa.unesa.ac.id/index.php/jim/article/view/23849
- PRADIKASARI, E., & ISBANAH, Y. (2018). Pengaruh Financial Literacy, Illusion of Control, Overconfidence, Risk Tolerance, dan Risk Perception Terhadap Keputusan Investasi Pada Mahasiswa di Kota Surabaya. *Jurnal Ilmu Manajemen* (*JIM*), 6(4), 424–434.
- Puspawati, D., & Yohanda, A. R. (2022). Bias Perilaku Pada Keputusan Investasi Generasi Muda. *Akuntabilitas*, 16(1), 41–60. https://doi.org/10.29259/ja.v16i1.15724
- Putri, W. W., & Hamidi, M. (2019). Pengaruh Literasi Keuangan, Efikasi Keuangan, dab Faktor Demografi Terhadap Pengambilan Keputusan Investasi (Studi Kasus Pada Mahasiswa Magister Manajemen Fakultas Ekonomi Universitas Andalas Padang). *Jurnal Ilmiah Mahasiswa Ekonomi Manajemen*, 4(1), 398–412.
- Rose, J. B. D., & Armansyah, R. F. (2022). Recency Bias Dan Confirmation Bias Pada Keputusan Investasi Investor Pasar Modal Indonesia. *Jurnal Ilmiah Manajemen Dan Bisnis (JIMBis)*, *1*(2), 136–152. https://doi.org/10.24034/jimbis.v1i2.5366
- Salvatore, T., & Esra, M. A. (2020). Pengaruh Overconfidence, Herding, Regret Aversion, Dan Risk Tolerance Terhadap Pengambilan Keputusan Investasi Investor. *Jurnal Manajemen*, 10(1), 48–56.
- Setiawan, Y. C., Atahau, A. D. R., & Robiyanto, R. (2018). Cognitive Dissonance Bias, Overconfidence Bias dan Herding Bias dalam Pengambilan Keputusan Investasi Saham. *AFRE* (*Accounting and Financial Review*), *1*(1), 17–25. https://doi.org/10.26905/afr.v1i1.1745
- Universitas Gajah Mada. (2023). Generasi Muda Mulai Berinvestasi. (https://ugm.ac.id/id/berita/23303-75-persen-generasi-muda-mulai-berinvestasi/)
- Witantri, A., & Triyanto. (2023). Pengaruh Representativeness Bias, Herding, Behavior, dan Pelatihan Pasar Modal terhadap Keputusan Investasi Generasi Millenial. *Jurnal Manajemen Dan Akuntansi*, 1(2023), 36–48.
- Yolanda, Y., & Tasman, A. (2020). Pengaruh Financial Literacy dan Risk Perception terhadap Keputusan Investasi Generasi Millennial Kota Padang. *Jurnal Ecogen*, 3(1), 144. https://doi.org/10.24036/jmpe.v3i1.8533
- Young, J. (2010). *Making Financial Education More Effective: lessons from Behavioral Economics. Working pa.* https://scholar.google.co.id/scholar?oi=bibs&cluster=7653368192880935142&b tnI=1&hl=id